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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/090.939	03/05/2002	Hideaki Tazawa	FUJR 19.495	6421

26304 7590 09/08/2006

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EXAMINER

LY, ANH VU H

ART UNIT PAPER NUMBER

2616

DATE MAILED: 09/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/090,939	TAZAWA ET AL.	
	Examiner	Art Unit	
	Anh-Vu H. Ly	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 June 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-11,13-15,17 and 18 is/are rejected.
- 7) ☒ Claim(s) 3 and 10-18 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>June 13, 2006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. This communication is in response to applicant's amendment filed June 14, 2006.

Claims 1-18 are currently pending.

Specification

2. The disclosure is objected to because of the following informalities: in page 7, line 27, replace "Each of rinks L1 and L2" with --Each of links L1 and L2--.

Appropriate correction is required.

Information Disclosure Statement

3. The information disclosure statement filed Jun 13, 2006 fails to comply with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609 because English translations for JP 10-13426 and JP 5-316133 documents were not provided. It has been placed in the application file, but the information referred to therein has not been considered as to the merits. Applicant is advised that the date of any re-submission of any item of information contained in this information disclosure statement or the submission of any missing element(s) will be the date of submission for purposes of determining compliance with the requirements based on the time of filing the statement, including all certification requirements for statements under 37 CFR 1.97(e). See MPEP § 609.05(a).

Claim Objections

4. Claims 10-18 are objected to because of the following informalities:

With respect to claim 10, in lines 3-4, replace "for setting a specific channel to a NUT setting for setting said specific channel as a NUT channel" with --for setting a specific channel to

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a NUT setting that sets the specific channel as a NUT channel-- to eliminate any confusion caused by double "for setting".

With respect to claim 18, in line 4, the first acronym "NUT" must be spelled out.

Claims 11-17 are automatically objected to as they depend upon objected independent claim 10.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 7-8 and 17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With respect to claims 7 and 8, in lines 6-8, "a section in which said non-preemptible channel" is unclear and incomplete. It is unclear what being claimed.

With respect to claim 17, in line 2, "a submarine BLSR" is unclear. It is unclear what a submarine BLSR is according to the specification.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary

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skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-2, 4-6, 9-11, 13-15, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kettinger (US Patent 6,950,409 B1) in view of De Boer et al (US Patent No. 6,934,248 B1). Hereinafter, referred to as Kettinger and Boer.

With respect to claims 1, 9, 10, and 18, Kettinger discloses a transmission device performing transmission control on a ring network (Fig. 1, BLSR ring 12) comprising:

a setting information relay unit relaying setting information that sets a specific channel as a non-preemptible channel restricted from being used for restoration (col. 5, lines 49-51, a provisioning node 16 comprises a node 16 that is operable to distribute its modifiable NUT table 40 as a master NUT table around the ring 12. Herein, these NUT channels are not protected for restoration in case a failure occurs);

a channel establishment unit determining, by referring to the setting information, whether a channel of interest should be set as said non-preemptible channel and establishing the channel (col. 8, line 63 – col. 9, line 2, at decisional step 414, the intermediate node 16b-d determines whether a difference exists between the compared NUT table bytes. At step 416, the intermediate node 16b-d updates its modifiable NUT table 40 with the NUT table byte. Herein, NUT channels have been updated); and

transmission media connecting the plurality of transmission device in a ring formation so that a ring network is formed (Fig. 1, ring 12).

Kettinger does not disclose a route switch control unit recognizing a section in which said non-preemptible channel that is not used for restoration has been established and a fault bypass

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control condition at the time of occurrence of a fault and performing a route switching control based on a result of recognition.

DeBoer discloses that some BLSR networks allow for communications between particular NEs to be unprotected, this unprotected traffic being transmitted within the working and/or protection channels but with lower priority such that, if the bandwidth used is required for other purposes or if a failure occurs in the particular channel being used for the unprotected traffic, the transmission of the unprotected traffic can be discontinued without serious problems (col. 2, lines 35-43. Herein, first of all, the channels carry unprotected traffic are non-preemptible channels and at least established between spans or network segments for communications. Secondly, the transmission of the unprotected traffic can be discontinued if a failure occurs is equivalent to fault bypass control condition at the time of occurrence of a fault. And at least, all the steps stated above are performed as a route switching control based on a result of recognition).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include a flow control of NUT channels in Kettinger's system, as suggested DeBoer, to improve system's bandwidth in case a failure occurs by discontinuing the transmissions of unprotected traffic.

With respect to claim 2, Kettinger discloses that wherein said setting information relay unit uses an idle byte out of overhead bytes in order to relay the setting information (col. 6, lines 39-46, K bytes).

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With respect to claims 4 and 13, Kettinger discloses that said setting information relay unit sends the setting information including an establishment request message (Fig. 4, block 406), and sends an establishment execution message after receiving a normal response sent back thereto (Fig. 4, block 410); and said channel establishment unit receives the establishment execution message (Fig. 4, block 418) and establishes said non-preemptible channel (Fig. 4, block 432).

With respect to claims 5 and 14, Kettinger discloses that wherein said setting information relay unit of a start transmission device is externally provided with the setting information (col. 5, lines 55-57, a provisioning node 16 may comprise a node 16 that is first to receive a new modifiable NUT table from a user. Herein, the user is externally located from the node), the setting information externally provided being relayed to an end transmission device (Fig. 5), so that said non-preemptible channel can be established (Fig. 5, block 526).

With respect to claims 6 and 15, Kettinger discloses that wherein the setting information is relayed to all transmission devices in the ring network (Fig. 1, ring 12) from the setting information relay unit in a transmission (Fig. 3A-B), so that said non-preemptible channel can be established (Figs. 4-5).

With respect to claim 11, Kettinger discloses using K-bytes in overhead to relay NUT table (col. 6, lines 39-47). Kettinger does not disclose using D bytes out of overhead bytes in order to relay the NUT setting information. However, using D bytes of overhead in ring

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networks is known in the art for carrying control information. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use D bytes to carry NUT setting information in Kettinger's system, to relay data control communications information.

Allowable Subject Matter

7. Claims 3, 12, and 16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The prior art does not teach or suggest that the channel establishment unit recognizes and establishes said non-preemptible channel via a designated write address in which the NUT table information should be written, as specified in dependent claims 3 and 12. The prior art does not teach or fairly suggest that the route switch control units in the transmission devices located at ends of the line in which the fault occurs perform route switching if a fault bypass route does not have any section in which the NUT channel has not been established, and do not perform route switching if a fault bypass route has a section in which the NUT channel has been established, as specified in dependent claim 16.

Response to Arguments

8. Applicant's arguments with respect to claims 1-18 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anh-Vu H. Ly whose telephone number is 571-272-3175. The examiner can normally be reached on Monday-Friday 7:00am - 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on 571-272-3179. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

avl


CHI PHAM
SUPERVISORY PATENT EXAMINER 9/5/02